

*Jave-la-Grande: A Place Name Chart of its East Coast**

W. A. R. RICHARDSON

In 1786 Alexander Dalrymple first suggested that the 'continent' of *Jave-la-Grande* on the Harleian or Dauphin map was evidence of Portuguese priority in the discovery of Australia.¹ The Harleian and other Dieppe maps² made in France in the mid-16th century are manifestly based on Portuguese originals, yet no surviving Portuguese maps show any evidence of this mysterious landmass. Suggestions that the discovery of Australia was successfully kept secret seem hardly credible in view of the well-known presence in France of Portuguese cartographers, the defection to Spain of Magellan and the cartographer Diogo Ribeiro amongst others, and the fact that an Italian, Alberto Cantino, could illegally purchase in Lisbon in 1502 so important a world map as the one commonly called the 'Cantino' after him.³

The advocates of the thesis that *Jave-la-Grande* is Australia have relied almost exclusively on its position, apparent scale and latitude, and upon imagined similarities between the northeastern parts of both coastlines (Fig. 1). They seem to ignore the fact that the vast majority of 16th century Portuguese charts of South East Asia which have come down to us are on a small scale and are therefore inevitably compilations. They must have been based originally on information obtained from several sources: local native pilots and their charts, handwritten sailing reports or rutters, possibly including coastal profiles, and from plane charts in the portolano tradition, without projection and probably without reliable scale. Undoubtedly ships' captains did not hug coastlines consistently and therefore what charts they did make would only be of those portions of coastline they actually saw and considered worthy of note for possible future reference. Intervening sections might be sketched in by guesswork. The Portuguese always made use of native pilots whenever they could, and the charts of the Far East and South East Asia made by Francisco Rodrigues (c. 1513), several obviously copied from information supplied by them, show no evidence that latitude, longitude, or scale were regularly incorporated. Even orientation is missing from his coastal panoramic drawings.⁴ Regrettably, no other large scale, early 16th century Portuguese charts of S.E. Asia seem to have survived. In any case, the navigational aids of the period were relatively primitive and many sailors were incapable of using them properly, so one should not really expect accurate, scale charts of little-known coasts in the early 16th century.

The late Avelino Teixeira da Mota, one of the leading authorities on Portuguese historical cartography, writing in 1973 about early portrayals of the north coast of South America stated 'certain simplistic criteria, now very much in vogue, are quite wrong when they interpret those outlines by measuring "latitudes" and "longitudes" on cartographic representations which resulted from voyages on which neither was determined'. He continued: 'one must always bear in mind the differences between the nautical techniques of the Portuguese and Spaniards and the extent to which these

* Grateful acknowledgement is made to the Calouste Gulbenkian Foundation for assistance in the preparation of this article.



Figure 1.

S.E. Asia and Australia with the Harleian outline of *Jave-la-Grande* superimposed. (Map drawn by Mr Jens Smith, Flinders University of South Australia.)

were reflected in cartography'.⁵ His comments are of course of general application in the early 16th century.

A recent article discussing the west coast of *Jave-la-Grande* and how it was incorrectly attached to Java proper, also shows how two charts of the Java shore of Sunda Strait, obviously from different sources, were wrongly joined by one compiler.⁶ His version of the western end of Java was copied uncritically by generation after generation of cartographers for well over a century. This could easily happen when the coast

concerned was seldom visited, or updated information did not reach the right hands in Portugal.

Two charts of part of the coast of Brazil including the Abrolhos Islands,⁷ made only nine years apart in the mid-17th century by João Teixeira Albernaz, show such different versions of the Abrolhos that, were it not for the place names provided, one would have no idea that they were both of the identical area.⁸

It is thus hardly reasonable to suggest that the N.E. coast of *Jave-la-Grande* is a detailed chart of the 'corresponding' part of Australia's east coast, that of Queensland, including the Great Barrier Reef, and northern New South Wales, made during a single voyage down that coast in 1522. Yet this is what Ian McKiggan⁹ and Kenneth McIntyre¹⁰ would have us believe.

When they come to the huge triangular promontory culminating in *c: de fremose*, Cape Howe as they would have it, they have to devise ingenious explanations to account for how that cape is shown as projecting some 1,500 to 2,000 kilometres into the 'Tasman Sea' at an angle of nearly 90°. If the bay named *Gouffre*, 'Gulf', on the Harleian map is really Port Philip Bay, as they maintain, then the accuracy of their hypothetical Portuguese mariner must be called in question when he completely disregarded as large a feature as Wilson's Promontory. Surely some convincing explanation should also be forthcoming to identify the bay normally transcribed as *Baye Neufve*, and the river mouths between it and *c: de fremose*, not to mention the named offshore islands?

Astonishingly, until very recently, no researchers examined critically the place names on *Jave-la-Grande*, except to compile rather inaccurate tables of the variant readings on some of the Dieppe maps or to declare them to be Portuguese, French, some cross between the two, or incapable of identification. It was taken for granted that *Jave-la-Grande* was so called by the French because they believed it to be Marco Polo's *Java Major*, the real identity of which is still uncertain. The fact that the name *Java Maior* identified Java itself on numerous Portuguese maps to distinguish it from *Java Menor* (Sumbawa) seems to have passed unobserved; likewise the fact that one of the Dieppe maps¹¹ clearly restricts the name *Iaua la grãde* to Java proper as the Portuguese did, not spreading it over the large landmass to the south as was done by other Dieppe cartographers.

Two articles have now examined the west coast names and they seem to suggest fairly convincingly that the coastline portrayed is really that of parts of the south coast of Java proper on a different scale from the main map.¹² That coast remained blank on Portuguese charts, or was drawn in hypothetically, until about 1640, some 20 years after the Dutch had produced a reasonably accurate outline of at least the western end of it.¹³

The Portuguese always approached the East Indies via the Cape of Good Hope and India, and thence almost exclusively through the Strait of Malacca, while the Dutch, from the 1590s, went across the southern Indian Ocean and then headed for Sunda Strait. This fact, and the well-known difficulty of calculating longitude at that time, account both for the Dutch wrecks on the west coast of Australia and for the early Dutch charting of Java's south coast by those who miscalculated and encountered it first, rather than Sunda Strait.¹⁴ In itself the south coast of Java was of no commercial interest and was, in any case, a very dangerous one.

If the west coast of *Jave-la-Grande* is not that of Australia and there is no Portuguese cartographical record of Australia's west and north coasts until some time after the Dutch discovery of part of the Gulf of Carpentaria in 1606, then it is highly unlikely that *Jave-la-Grande's* each coast is that discovered by Captain Cook. The Portuguese were fairly careful to abide by the dictates of the Treaty of Tordesillas of 1494 and not

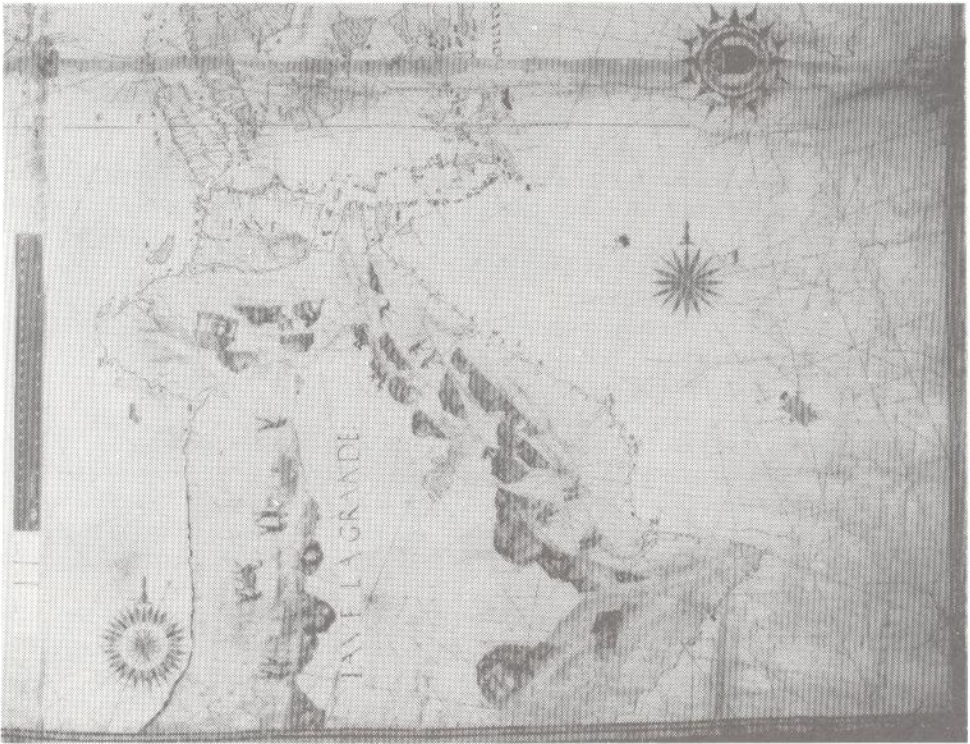


Figure 2.

The Harleian or Dauphin version of *Jave-la-Grande*. (By permission of the British Library, London.)

stray into that half of the globe reserved for their powerful neighbour Spain.

If *Jave-la-Grande*'s east coast is not that suggested by Dalrymple, Collingridge,¹⁵ McKiggan, McIntyre and many others, it must either be fictitious, or a real chart of some other coastline. There were certainly plenty of fictitious coastlines drawn in on 16th century maps, though very few on Portuguese and Spanish ones. Johannes Schöner, on his globe of 1515,¹⁶ was one of the first cartographers to give a graphic representation of the long-imagined great southern continent. After Magellan's voyage, 1519–22, a very significant number of cartographers did so, for Tierra del Fuego was taken to be evidence of its real existence. Oronce Finé produced his version in the early 1530s¹⁷ and several members of the Dieppe school also gave their interpretations, most admitting that the continent had not yet been discovered. The so-called 'Pasterot' atlas provided a very detailed and convincing landmass together with an impressive array of place names.¹⁸ Reports emanating from the survivors of the Magellan expedition concerning the size of the Patagonian Indians led to a proliferation of imaginary islands, lands and bays populated with giants, while Magellan's name, legitimately attached to the strait which still bears it, was used to baptise many other, apocryphal features, including the continent itself, *Terra Magallanica*.

The 'Pasterot' atlas, which has been undeservedly disregarded, provides a fascinating section of the Antarctic continent just west of the Straits of Magellan. It is

apparently an imperfect duplicate of the east coast of *Jave-la-Grande* on which *c: de fremose* is baptised *Cap de la terre australe*, and an identical island group to *saill* and *magna*, in an identical relative position, is called *Isle de Magaïllan*.¹⁹ A little further west appears a large island, called *La Ioncade*, probably one of the numerous versions of Marco Polo's *Locach*, such as *Locat* and *Beach*. Together with Ptolemy's *Catigara* and Biblical *Ophir*, it flitted tantalizingly further into the unknown as each suggested location for it was discovered and found wanting.

It is by no means certain that this widespread belief in *Terra Australia Incognita*, together with misinterpretations of Marco Polo's description of S.E. Asia, influenced the placement of *Jave-la-Grande*'s west coast; it seems possible that the Portuguese original had the words *Java Maior* on it and was thus 'attached' to Java proper by a Portuguese. However, once it had been placed in proximity to the usual incomplete western end of Java proper, the unfinished east coast of Sumbawa on Portuguese maps may well have suggested where an unidentified eastern coastline chart might belong.

If one rejects the Australian identification, one should not accept the mysterious coastline as an imaginary creation before examining the other solution, namely that it is a chart of some other real coastline. The fact that it has remained unrecognised for so long suggests either that it was more than usually inaccurate for its time, or that the constituent parts were incorrectly assembled, or that the coast was but little known at the time. Some combination of these alternatives is also a possibility.

Andrew Sharp, who was one of those who suggested that *Jave-la-Grande*'s west coast was part of the south coast of Java, also suggested that the east coast was really a chart of the north coast of Sumba,²⁰ but this was based purely on some similarity in coastal outline, in itself unreliable evidence. In any case his explanation leaves too many features unaccounted for. Albert Anthiaume, on the scantiest of place name evidence based on the Vallard atlas alone, suggested the north coast of New Guinea,²¹ but no piece of that coast bears any resemblance to the east coast of *Jave-la-Grande*. Admittedly there is one part of the south coast of New Guinea which at first glance might fit, where Tanjung Vals could conceivably correspond to *c: de fremose*, but in this instance also there are too many features unaccounted for.

In attempting to establish a positive identification one must use all the evidence available, geographical, cartographical and historical, as well as that provided by paleography and place names. When all these are taken into account the most promising coastline is that of what is now Vietnam (Figs 3 and 4). It is not unreasonable to equate Vinh Rach Gia with *Gouffre*, and Mui Ca-mau, known to the Portuguese as *cabo de camboja*, 'Cape Cambodia', with *c: de fremose*, while the mouths of the Mekong would account for the river mouths between *c: de fremose* and *Baye Neufve*. *Baye Neufve* itself would then correspond to the large indentation behind Vungtau where the Saigon or Dong-nai Rivers enter the sea, and the Con Son Islands, known to the Portuguese as *pulo condor*, would correspond to the island group named *saill* and *magna*.

As with the Australian identification, it can be objected that the angle of the *c: de fremose* promontory to the general lie of the coastline northwest of it presents a problem. Certainly the Mekong delta does not lie at an angle of almost 90° to the Vietnamese coast north of it, but this lack of correspondence could well be explained by an incorrect assembling of two or more charts. Such an explanation in the case of the Australian identification does not seem to have suggested itself to researchers. However, the coast of Vietnam on the earliest European maps, made before any Portuguese are known to have sailed along the coast, all show a large triangular promontory corresponding to the Mekong delta lying at a very distinct angle to the coast north of

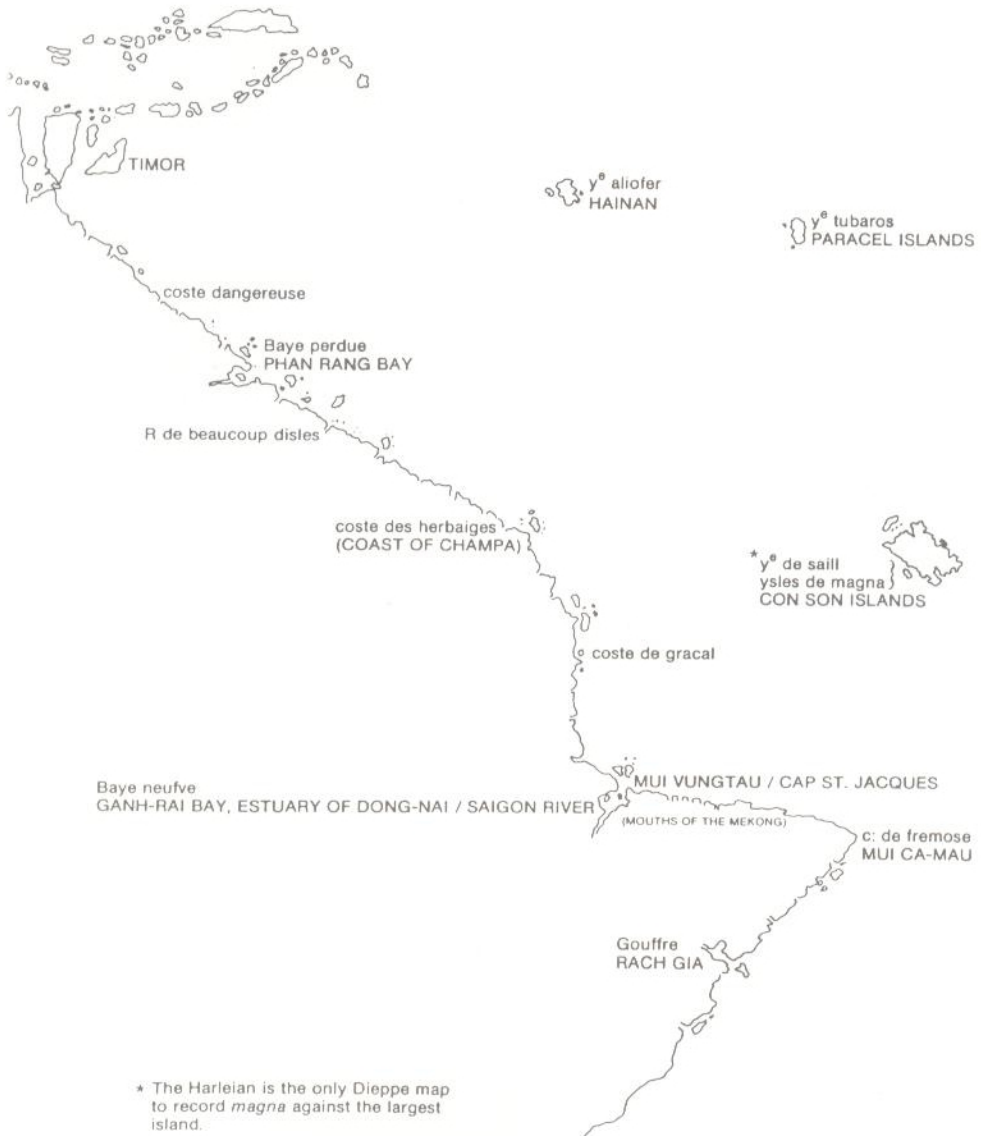


Figure 3.

Outline of the east coast of *Jave-la-Grande* on the Harleian map with significant place names and suggested identifications. (Map drawn by Mr Jens Smith, Flinders University of South Australia.)

it. The 'Cantino' map of 1502, the Caverio one of c. 1505,²² and probably the Francisco Rodrigues map of the Gulf of Siam (c. 1513)²³ must all have been made on the basis of information obtained, perhaps orally, from Asian pilots, probably Arab, Indian, Malay or Chinese. The Waldseemüller 'Carta Marina' of 1516²⁴ was also obviously based on similar sources, presumably being copied from the 'Cantino', the Caverio or some related chart.

JAVE-LA-GRANDE

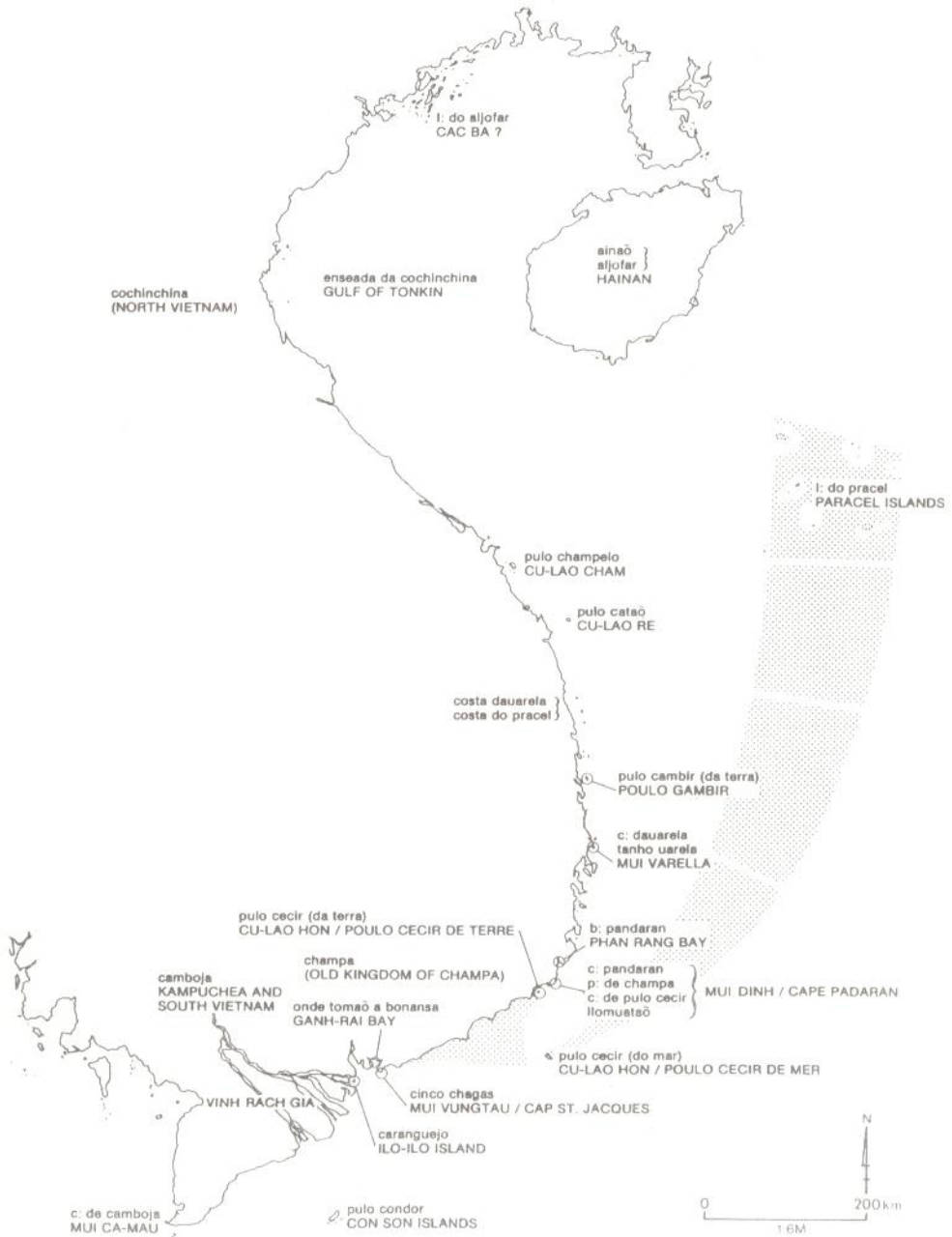


Figure 4.

Vietnamese coast today with the addition of major shoal areas shown on Portuguese 16th century charts. (Place names shown are standard versions of those recorded on Portuguese charts of the period, together with corresponding modern names where possible. Only those mentioned in the text are included.) (Map drawn by Mr Jens Smith, Flinders University of South Australia.)

Sixteenth century Portuguese charts which include what is now Vietnam usually show it as divided into three sections: Cochinchina, roughly corresponding to Annam or northern Vietnam; Cambodia, which then included the whole of the Mekong delta, as well as what we now know as Kampuchea; and, between them, the kingdom known as Champa. The latter's borders were almost continually shrinking owing to the encroachments of the kingdoms north and south of it.

The earliest known Portuguese voyages from Malacca to China were those of Jorge Álvares (1513-14) and Rafael Perestrelo (1515-16). Both appear to have travelled in Malay or Chinese junks, but though both returned successfully, there is no record whatsoever of their routes. In August 1516 Fernão Peres de Andrade led an abortive expedition of several ships, including at least one junk, towards China, with Tomé Pires, the first Portuguese ambassador to China, aboard.

Somewhere near the entrance to the *enseada da cochinchina*, the Gulf of Tonkin, the onset of the northeast monsoon in mid-September forced them to turn back. The chroniclers Castanheda²⁵ and Gaspar Correa²⁶ both record the expedition's miraculous escape from being shipwrecked on some shoals there. Another chronicler, João de Barros,²⁷ who was a personal friend of Fernão Peres de Andrade,²⁸ merely mentions a storm. He does, however, provide fascinating details of the return voyage, including a hazardous landing for water near an unnamed population centre somewhere on the Champa coast. Successfully and amicably concluded, Duarte Coelho, in command of a junk, made his way to Siam for his second visit there, while the rest of the fleet called for more water and provisions at *pulo condor*, now the Con Son Islands. Barros explains quite correctly that *pulo* was the Malay word for island and that *condor* was its name. Throughout the days of sail these 'wax gourd' islands were a regular watering and supply stop on the route between Singapore and China, though they were not always inhabited; there was even an English settlement on the major island for a few years in the early 18th century. From *pulo condor* Fernão Peres de Andrade returned to Malacca via Patane (Pattani).

Regrettably we have no details of the route of the first successful official voyage to China in 1517, though we know the names of the captains of the vessels involved, that Fernão Peres de Andrade was again in command, that the ambassador, Tomé Pires was landed and that Duarte Coelho got there from Siam (Thailand) before them.²⁹

The first Portuguese charts to show a fair outline of the Vietnamese coast are those made in Spain by Diogo Ribeiro in 1525, 1527 and 1529,³⁰ obviously on the basis of information obtained from Portugal, despite attempts to prevent such information from leaking out. They show evidence of the progressive acquisition of information about the Gulf of Siam, for example, and where the 1525 map shows the Paracels merely as a group of islands, by 1527 they had expanded into the enormous shoal that was such a prominent, but largely imaginary, feature on charts of the South China Sea until the early 19th century. The very gradual curve in the Vietnamese coast as recorded on the 'Cantino' and its successors is replaced by a much more pronounced curve, and the Mekong delta is no longer shown as lying at a distinct angle to it. The García de Torenó map of 1522, which one might have expected to show some advance on the 'Cantino' type outline, is, at least insofar as the Malacca to China section is concerned, even more primitive.³¹

If the east coast of *Jave-la-Grande* is really a chart of part of the Vietnamese coast, then it must have been made before the Diogo Ribeiro maps and was presumably a composite one, assembled according to the pattern provided by the 'Cantino' or related maps. For reasons which appear later, it seems probable that it resulted primarily from the abortive 1516 voyage of Fernão Peres de Andrade.

Cartographical similarities and historical probabilities alone, even if significantly

more convincing than so far suggested, do not justify completely disregarding the evidence of place names when it is available. It was precisely place names that provided more or less conclusive evidence about the identity of the west coast; they also have a vital contribution to make towards a solution of the problem of the east coast's identity.

Before looking in detail at some of the significant place names along the coast, a brief examination will be made of the sort of difficulties that arise in studying them. If the names were all genuine attempts to copy inscriptions found on Portuguese originals and not French additions, then their genesis must have been as follows: Portuguese mariners heard Asian place names from the mouths of speakers of a variety of different languages and endeavoured to record them in accordance with their own sound system, in a far from standardised spelling. Some Malay names are recorded in over a dozen different versions, and most of the features of the Vietnamese coast were known to the Portuguese by their names in that language. However, the informants on occasions were probably Arab, Cambodian, Cham, Vietnamese or Chinese, so it was possible for one and the same place to be recorded on charts or in rutters in numerous variants of some six different names.

Especially later on, the Portuguese gave their own names to some features, and in any case, if a native word sounded reasonably like a Portuguese one, they would happily write that word down. A Frenchman, unaware of this, could well 'translate' such words. Thus the Malaysian state of Pahang, which the Portuguese sometimes spelled *pão*³² could well be 'translated' by a Frenchman as *pain*, 'bread'. Pierre Desceliers, one of the Dieppe cartographers, on his 1546 chart, turned the island of Diego Garcia in the Indian Ocean from the abridged Portuguese form of *ilha de d^o garcia*, or *gracia* with the common metathesis of 'r', into *y^e de dieu grace*. One must suppose this to be a version of 'Island of the grace of God', presumably by analogy with the Latin *Deo gratias*, 'Thanks be to God'.

Another outstanding example of this sort of thing is the name given by the Portuguese to the Vungtau headland where the Saigon River enters the sea. They called it *cinco* or *sinquo chagas*, the 'five wounds' of Christ. This eventually turned into the French *Saint Jacques*, being then translated into English as St James. It is only when one sees such intermediary forms as a Dutch rendering *Sinques Jaques*³³ and an Anglo-Dutch version *Singers Jaques*,³⁴ that one can appreciate how such changes could occur. A Frenchman reading the first three letters of any of the early versions of the first word would in any case pronounce it in exactly the same way as he would pronounce *saint*, while the Dutch rendering as 'j' of the Portuguese 'ch' sound and a simple misreading of 'g' as 'q' was quite sufficient to cause a Frenchman to add the 'missing' letter 'c'.

Such changes occurred through mishearing and miscopying by successive generations of cartographers who had little or no firsthand knowledge of the places concerned or the languages involved. Frequent confusion in the copying of any combination of 'm', 'n', 'u' and the then undotted 'i' was rendered worse by the fact that 'u' was used for 'v' and not infrequently for 'b'—as in *setuual*³⁵ for the town of Setúbal in Portugal or *martauao*³⁶ for Martaban in southern Burma. A carelessly written 'n' or 'u' could be read as an 'r' and *vice versa*. The old long letter 's' was taken for an 'f', an 'l' or a 'j'; certain forms of 'c', 'r' and 't' were almost indistinguishable; certain varieties of 's' and 'g' could hardly be told apart, while many a final 's' looked like a 'b'. The vowels 'a', 'e' and 'o' were very often difficult to tell one from another and in any case the French commonly rendered any Portuguese final vowel as an 'e', since that was their normal final vowel. When the use of capital letters became more frequent *balle*, the island of Bali, could become *Galle*³⁷ on a number of Dutch charts, and *Auarella*, the

Portuguese/Malay name for a prominent headland on the Vietnamese coast, Cape Varella, became *Ruarella*.³⁸

The fact that spelling was haphazard meant that the same word could appear in a variety of guises: the sound of the letter 's', as in 'song', could be represented in Portuguese by an 's' too, but also by 'ç' and 'c', for the cedilla was not as yet in regular use; 'i', 'y' and 'j' were interchangeable; Portuguese nasal sounds such as the modern form *ão*, in *são*, 'saint', could be rendered as *ã*, *am* or *ão*, the tilde then being written normally over the second vowel, though often it was just a scrawl the whole length of a word. Moreover, the tilde, though now exclusively used in Portuguese to indicate nasal vowels, was also used in the 16th century as a general abbreviation symbol, as *q* for *que* or *trã* for *terra*. Unfamiliar abbreviations caused yet further problems. Thus *p^o*, the common abbreviation for the Malay *pulo*, 'island', was often taken by the French to be a short form of the Portuguese *porto*, *pedro* or *paulo*, and was in consequence transcribed as *port*, *Pierre*, or *Paul*.

In examining the place names on the east coast of *Jave-la-Grande* the first problem is that no two Dieppe cartographers coincide completely in the number of names they record, while spelling varies widely and even the positioning of the names is not always consistent. The Vallard (1547)³⁹ and Le Testu (1556) atlases give some 70 and 30 names respectively on the coast and offshore islands, while the Harleian and Desceliers (1546) maps provide only ten or a dozen. Unfortunately, the Rotz hemisphere map⁴⁰ which shows the whole coast gives no names at all, while his detailed map of the Far East and S.E. Asia⁴¹ only covers the very northern part of *Jave-la-Grande*. The 'Pasterot' atlas on its overlapping folios provides some 25 names.⁴²

The Vallard atlas, above all, has given rise to the hope that its large number of names will provide some useful clues, especially as it includes a number of saints' names. One might expect them to be arranged in chronological order of the saints' days concerned and thus indicate the direction of the supposed voyage and the time of year when it took place. Unfortunately there is no such consecutive ordering.

The fact that three cartographers provide such a disproportionate number of names compared with the others, in itself constitutes a problem. One might well presume that either those three had access to a common source denied to the others, or that one, presumably Vallard, had such access and the other two copied selectively from him. However it is highly suspicious that on both east and west coasts Vallard produces far more names than any other Dieppe cartographer on representations of *Jave-la-Grande* and far more than appear on even the most detailed Portuguese maps of Vietnam and the south coast of Java. Furthermore, he puts several identical names on both coasts, and his copying of names elsewhere that one can check on show him to have been an extremely inaccurate copyist. If future research is to make headway through studying the Vallard place names, those which apparently make least sense will probably prove the most rewarding. In conclusion, however, it seems quite possible that he invented a large proportion of his names on *Jave-la-Grande*, probably to impress a patron, as 'Pasterot' undoubtedly did on his Antarctic continent⁴³ and his invented portions of the west coasts of North and South America.⁴⁴

In view of the above considerations it seems reasonable to examine in detail only those names which are common to a number of maps. Insofar as it is possible to transcribe into print their manuscript renderings on the Harleian map they are shown on Figure 3, together, where possible, with their suggested correspondence to features on the Vietnamese coast. The relevant section of the Harleian map itself appears in Figure 2.

Some names are clearly French: *coste dangereuse*, 'dangerous coast', *Baye perdue*, 'Lost Bay', *coste des herbaiges*, 'coast of pastures', and *Gouffre*, 'gulf' or 'bay'. The bay

usually transcribed as *Baye Neufve*, if that transcription is correct, would mean 'new bay'. The names of the two islands of *aliofer* for *aljofar*, 'seed pearl', and *tubaros*, presumably for *tubarois* (mod. Port. *tubarões*), 'sharks', are clearly Portuguese.⁴⁵ The cape called *fremose* is undoubtedly a Gallicized version of the 16th century Portuguese adjective *fermoso* or, with metathesis of the 'r', *fremoso*, 'beautiful'. It is more familiar to English speakers in its modern feminine form *formosa* as the name the Portuguese gave to Taiwan. Neither *gracal*, the name given to part of the coast, nor *saill* nor *magna* attached to the remaining offshore named island group, mean anything as they stand, either in French or Portuguese. *R de beaucoup disles*, 'River of many islands', is clearly French, but unfortunately the Vietnamese coast as viewed from a ship has so many areas that this might fit that it is not of much help for identification purposes.

One cannot take for granted that a French word on the Dieppe maps is necessarily a translation of a Portuguese word. It may be, but could equally well be a French cartographer's addition or a version of a place name in some Asiatic language which seemed like a Portuguese or French word.

In examining the west coast place names, it was the apparently nonsensical inscription which seemed to read *Quabeseqmesce* on the Harleian map that provided the clue that proved to be a breakthrough. It was the result of a misreading of three Portuguese words run together, *Quabeb aqui esta*, 'Cubeb is here'.⁴⁶ Cubeb is a now little-known spice which then only grew in Sunda in western Java. Concentration on that area led to further discoveries, such as the identification of *Hame* (i.e. *Havre*) *de Sylla* and the nearby nameless *cap*, 'cape', as the harbour of Cilacap, the only major port on the south coast of Java.⁴⁷

In the case of the east coast also it is apparently puzzling place names, in conjunction with cartographical features, that have provided vital initial clues.

If one accepts the Vietnam hypothesis, then the islands named *saill* and *magna* on the Harleian and Desceliers (1546) maps represent the Con Son group. We already know that these were known to the Portuguese as *pulo condor*. They are almost certainly the islands called Condur and Sondur by Marco Polo. In the apparently Arabic form of *fulucandora*,⁴⁸ the name was attached both to the Con Son group and to Mui Ca-mau on the 'Cantino' map. With slight variations it also figured on the Caverio and Waldseemüller (1516) maps, as well as on several others (Fig. 5).

If the Portuguese, as early as 1502, already knew of the island group by some version of its Malay name, why does it appear as *saill* and *magna* on the Harleian and Desceliers (1546) maps?

Other Dieppe cartographers, with one exception, agreed in the spelling of *magna*, but *saill* also appeared as *sal*, *sel*, and *sell*.⁴⁹ The cartographers concerned evidently thought the name some version of the Portuguese word for 'salt', so rendered it as *sal* or 'translated' it into French. Why did the anonymous Harleian cartographer and Desceliers insist on leaving in the letter 'i'?

Magna is a perfectly good Latin word, but no French or Portuguese word from that root would have been used by either nationality to mean 'big', as has been suggested. In both cases the word *grande* would have been used, and in any case, with the exception of the Harleian, all the Dieppe maps which include these islands attach the word *magna* to the second largest, not the largest one.⁵⁰

The positioning of the *saill* and *magna* group in relation to the *c: de fremose* promontory corresponds remarkably well to that of the Con Son (*pulo condor*) group vis à vis the Mekong delta culminating in Mui Ca-mau (*cabo de camboja*). However, a comparison of the *saill* and *magna* group off Jave-la-Grande's east coast on the Dieppe maps with the Con Son Islands off Vietnam on a detailed British Admiralty chart

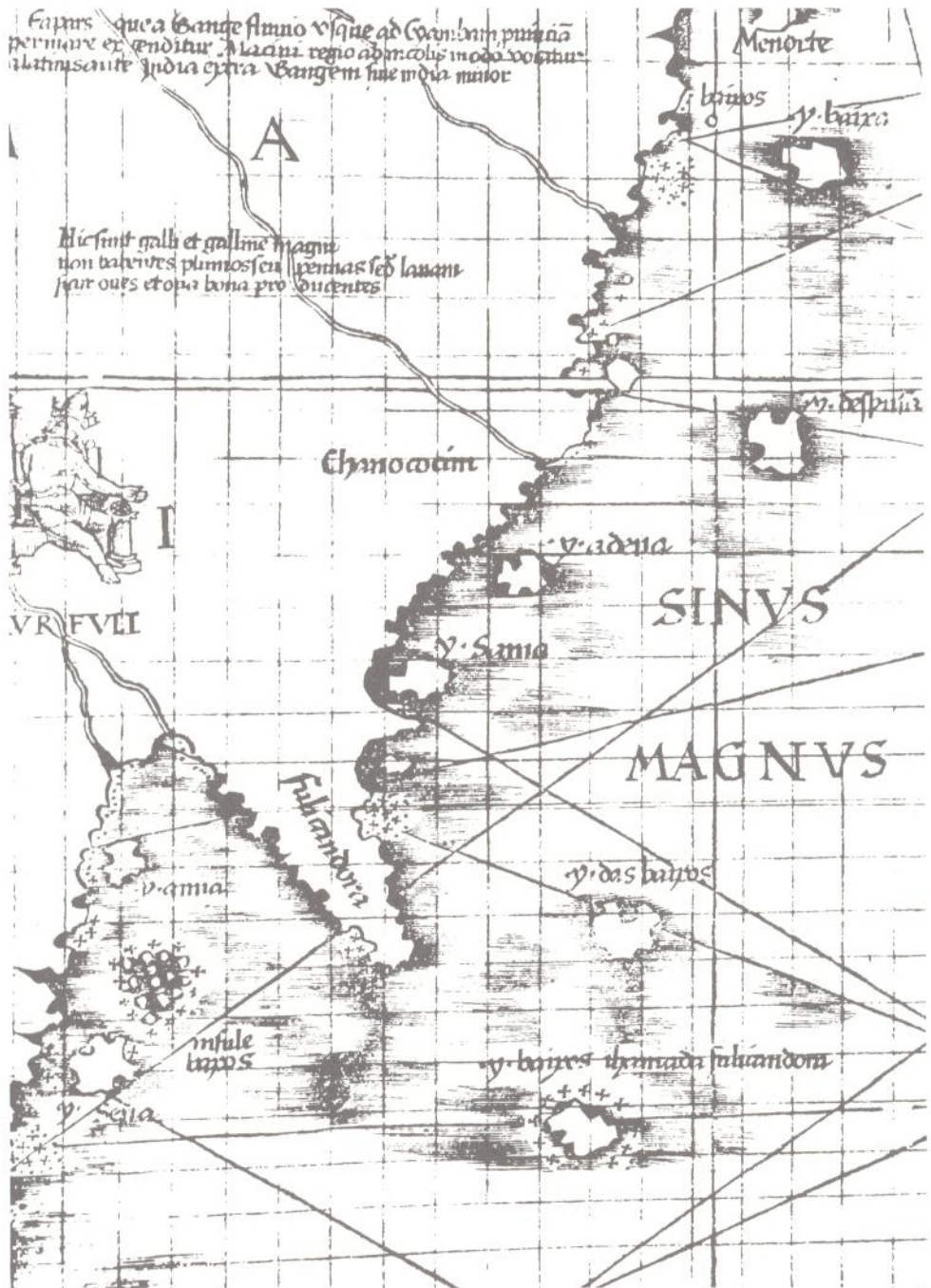


Figure 5.

Vietnam on the Waldseemüller 'Carta marina' (1516). The *magna/candora* phenomenon is most obvious on the inscription against the islands concerned, rather than on the adjacent peninsula. (By courtesy of the Indiana University Library.)

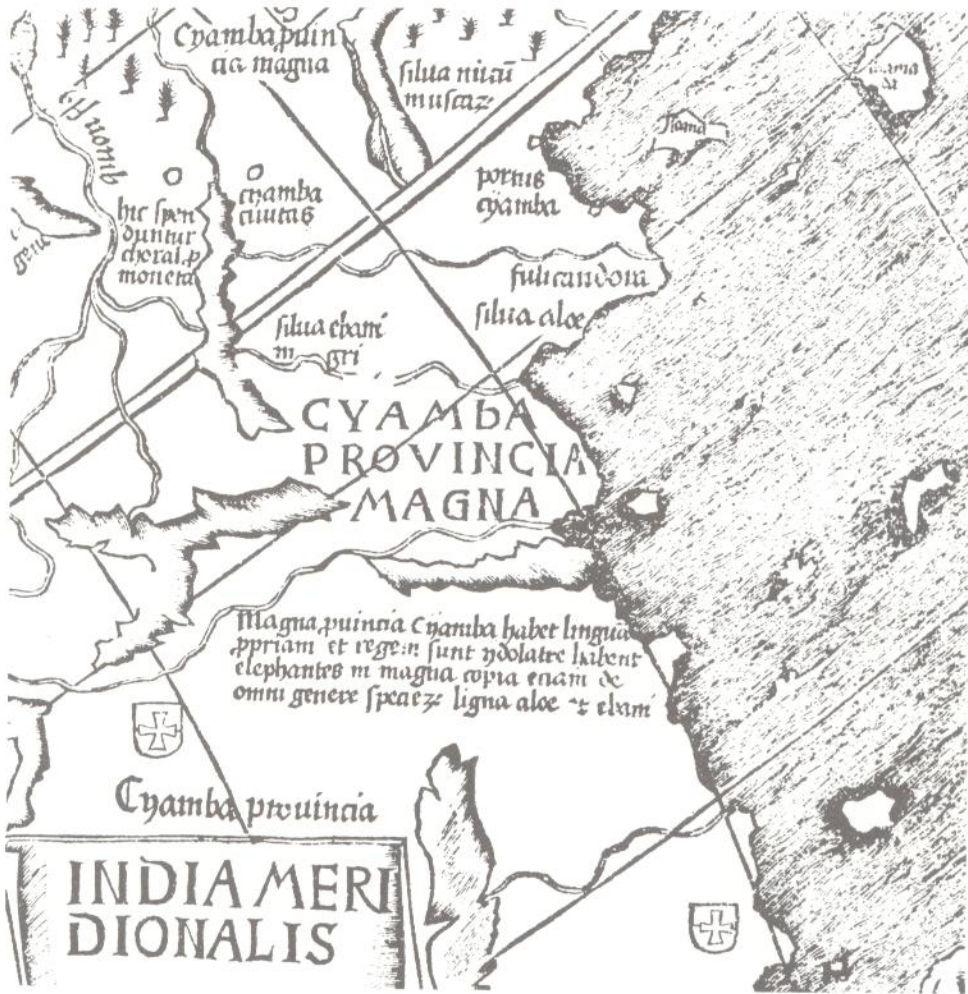


Figure 6.

Champa on Waldseemüller's 1507 map. (By courtesy of the Indiana University Library.)

reveals that on the former the second largest island is north of the largest, when in fact it should be south of it.⁵¹

It has already been implied that *Jave-la-Grande*'s east coast is almost certainly a composite chart. The fact that the Con Son Islands were apparently incorporated upside down at some stage in the compilation would seem to confirm the assertion. This inversion hypothesis may seem unlikely, but evidence suggests that Malay and Chinese maps of the period did not have a standard orientation and this section of the map may well have come from one of those sources. However, irrespective of its origin, could not the compiler have inverted not only the outline of the islands but also the accompanying inscription? If by sheer chance this action resulted in readable words, even if they were not understood, then he might well not have realised that he had incorporated this section upside down. The odds against this happening must be long, but nevertheless this appears to be exactly what occurred.

By the spelling conventions of the early 16th century the word *saiill* could equally well have been rendered *sajll* or *sayll*. We obviously have no knowledge of the handwriting peculiarities of the Portuguese who produced the original sketch of this island group and attached a name to it, but even in modern print an inversion of *sayll* produces something remarkably like the Portuguese word for islands, *Ilhas*. In handwritten form such similarity could well have been much more striking.

What about *magna*? Turn the 'Cantino' and Waldseemüller 1507 and 1516 maps upside down and look at their manuscript and engraved versions of the last letters of *fullucandora* and *fulicandora* respectively (Figs 5 and 6).⁵² In all three cases the *candora* portion inverted produces a perfectly recognisable version of the word *magna*. In handwritten form the correspondence may of course have been even closer. It can surely not be mere coincidence that a correction of the orientation of the islands by inversion, also produces, by the inversion of *sayll* and *magna*, the inscription *Ilhas candora* or *condora*, the earliest version of the name by which the Portuguese knew and recorded that group. From Diogo Ribeiro's maps onwards the name did not appear with that final vowel on Portuguese or Dutch charts.⁵³

The inscription *coste des herbaiges*, 'coast of pastures', was one of those picked on by James Burney, somewhat naively, as evidence for the Australian identification. He attempted to equate it logically with Botany Bay,⁵⁴ when that name is perfectly well accounted for by the presence of the botanist, Joseph Banks, on the Cook expedition. In positioning it corresponds reasonably well to the inscription *costa de champa* on nearly all 16th century Portuguese maps showing the Vietnamese coast, and *champa* is only one letter different from the French *champs*, 'fields', a perfectly acceptable synonym for *herbaiges*, 'pastures'. As will be shown later, another inscription was rendered as *dangereuse* by some cartographers and as *perilleuse*, a synonym, by others.

C: de fremose on the Harleian map appears on other maps, with or without the *de*, as *fromosa*, *frimosa* or *frimoza*.⁵⁵ Those Dieppe cartographers who do not give a final 'e' to their versions of the word, all give a final 'a'. Yet if the first word of the original Portuguese inscription was the masculine noun *cabo*, 'cape', as they unanimously imply, then the original adjective should have appeared in its masculine form *fremoso* and not the feminine *fremosa*. The fact that none of the Dieppe cartographers record a final 'o' makes one wonder why. Conceivably the original word used for cape could have been the feminine noun *ponta*, yet no Dieppe cartographer gives *pointe*, its French equivalent, and in any case *ponta* was generally used only for small headlands, a description decidedly not applicable to Mui Ca-mau.

We have seen that the cape concerned corresponds to what the Portuguese knew as the *cabo de camboja*. It appeared in a multitude of other spellings, including *canboja*, *carboa*, *camboia*, *caboia*, *camcaya* and *cābaia*,⁵⁶ the last two probably through confusion with the port of *cambaia* (Cambay) in India. The manuscript text of the beginning of 'Tome Pires' description of Kampuchea in his *Suma oriental*,⁵⁷ originally written some time before he reached China in 1517, gives some idea of the difficulty of reading 16th century script (Fig. 7). It also shows how easily a Frenchman could have mistaken the '*dec*' of *Reyno de camboja* 'Kingdom of Cambodia', for *fr*. The common confusions mentioned above between 'c' and 'r', 'j' and long 's', the constant chaos in combinations of undotted 'i', 'm', 'n' and 'u', together with the use of the latter letter for both 'v' and 'b', could well account for a manuscript spelling intended to read (c:) *decanuoja*, '(cape) of Cambodia', being read by a Frenchman as *fremosa*. It was a name found in several locations on early 16th century Portuguese maps and would therefore be familiar to a Dieppe cartographer. The maker of the so-called Pierpont Morgan map not merely gave the name to the cape, as did the other Dieppe carto-

graphers, but also applied it to the bay which is usually transcribed as *Baye Neufve*.⁵⁸ This happens to be the bay into which both the Saigon River and the most northerly mouth of the Mekong discharge, and the Mekong was commonly known to the Portuguese as the *rio de camboja*. This is, however, probably no more than a coincidence, since the Pierpont Morgan map also names a coastal feature much further north as *p^o fremose*, well beyond the then boundaries of Cambodia. It does at least bear witness to familiarity with the name.

The most prominent headland halfway up the coast of Vietnam is Mui Varela. It was known to the Portuguese by the semi-Malay name of *ponta da varel(l)a*, or more commonly *cabo da varel(l)a*, 'cape of the pagoda', because of the shape of a very tall rock formation which crowned it and was visible from far out to sea. It sometimes figured as *tanho varel(l)a*,⁵⁹ *tanho* being the commonest Portuguese rendering of the Malay word for cape, *tanjung*. However, it most commonly appeared as *dauarela*,⁶⁰ for the normal contraction of *de*, 'of', with the following Portuguese feminine definite article *a*, was then normally written attached to the adjacent noun.

Several early maps record the coast between this cape and *pulo cataõ* (Cu-lao Re) as the *costa dauarela*.⁶¹ A manuscript version of this, with the 'u' looking like an 'n', the following 'a' with a slight tail to it taken to be a 'g' and the 'l' mistaken for a long 's' would give a Frenchman the impression of being *dangresa*, quite sufficiently like *dangereuse* to make him transcribe *costa dauarela* as *coste dangereuse*, or 'translate' it by a synonym as *coste perilleuse*, 'dangerous coast'.⁶² Jean Rotz, the half-Scottish Dieppe cartographer, wrote *costa dāgerosa*.⁶³ There is no Portuguese word based on the root that gave the word 'danger' in both French and English, the Portuguese adjective being, in its feminine form, *perigosa*. Rotz' version, with both words ending with a Portuguese final vowel 'a', rather than the French final 'e' therefore suggests that the original Portuguese inscription is unlikely to have been *perigosa*, or he would presumably have written one of the two words written by most of the other Dieppe cartographers. Moreover, his version is fairly convincing evidence that *dangereuse* and *perilleuse* are attempts to Gallicize and 'translate' respectively an original Portuguese inscription the French did not understand, while he attempted a transcription of what he thought he saw.

Below *coste dangereuse* the Dieppe maps show a bay named *Baye perdue*, 'lost bay', though there is some variation in spelling. A literal acceptance of this name would suggest that it was a bay that had been found on one voyage but could not be relocated on a subsequent occasion, or perhaps that the bay was hidden or invisible from the sea. However, since unfamiliar names were frequently transcribed as similar familiar words, a search of the coast of Vietnam on 16th century Portuguese maps is worthwhile to see if one cannot find a place name which could have given rise to such an inscription.

A prominent headland on the coast of Champa is now called either Mui Dinh, its modern Vietnamese name, or Cape Padaran, a version of the old Cham name, Panduranga. The Portuguese knew it, not merely by several variant renderings of the latter, but also by three quite different names, depending on the source of their information. It was known as *ponta de champa* because it was the headland in the immediate vicinity of the capital of that kingdom and *cabo de pulo cecir (da terra)* because it was just north of that well-known island landmark with its Malay name. However, some charts recorded it by its Chinese name, *Lo wan t'ou*,⁶⁴ rendered by the Portuguese as *llomuataõ*⁶⁵ or something very similar.

Strangely, versions of the Cham name are fairly rare on the 16th century charts that have come down to us, but, in such guises as *pandeiraõ* it turns up quite frequently in surviving 17th century manuscript rutters; unfortunately, since these are inevitably the

end result of numerous copyings, it is impossible to estimate the age of the lost originals except in very few cases where internal evidence provides a clue.

The name was applied, not only to the cape, but also to the bay and the port just north of it, now both known as Phan Rang.⁶⁶ As *p^o*: or *puerto de penara* it appears on Diogo Ribeiro's 1529 map in the Vatican library. The Dutch cartographer Ortelius in 1570 records a *Punta penaia*,⁶⁷ evidently a version of this, but it does not seem to reappear until about 1621 on a chart by another Dutch cartographer, Hessel Gerritsz,⁶⁸ obviously copied from a Portuguese source. The cape on this Gerritsz chart is called *Pta. or Ponta de Paderaõ / C. Cecir*. If we examine the earliest form mentioned, *p^o: de penara*, it seems clear that it is the result of a misreading of some variant spelling such as *pandrã*,⁶⁹ where a somewhat short curved top to a 'd' made the letter appear an 'a'. A carelessly finished 'n' was easily misread as an 'r' and vice-versa, as can be seen in one of the versions of *camboja* mentioned above. The French habit of altering the Portuguese final vowels 'a' and 'o' into their normal final vowel 'e', and the fact that both Ribeiro and Ortelius gave the first vowel as an 'e', together explain how easily the word *perdue*, 'lost', can have been produced by a Frenchman.

It is obvious from a glance at Waldseemüller's 1507 map⁷⁰ that at that time he had very little real idea either of the position or outline of Vietnam, though he does depict the delta of an unnamed river ending in a cape called *fulicandora*. The country itself he calls *Cjamba* (i.e. *Champa*); it is shown as having a port called *portus cjamba*, in Latin, and further inscriptions in Latin make clear that its two main exports, ebony and the odoriferous aloeswood or eaglewood were known. The port concerned is undoubtedly that referred to by the Portuguese both by some form of the word *pandrã* and as *porto de champa*.

Between *coste des herbaiges* and *Baye Neufve* appears the inscription *Coste de gracal*. No place name appearing on any Portuguese or early Dutch chart seems capable of having given rise to this, but Gaspar Viegas' charts of c. 1537⁷¹ show an unnamed, triangular shoal pointing out to sea just south of *pulo cecir (do mar)* from his inscription *aquí se começa a trra de campa*, 'here begins the land of Champa'. *Costa de champa* we have seen corresponds to *coste des herbaiges*, and the word *pracel*, not very different from *gracal*, is one of the many near synonyms for shoal. On the modern chart the area seems to correspond to an extensive shallow area between Cap St Jacques and Cape Padaran, including Britto Bank and Banc Hollandaise.⁷²

The island of *aliofer* has nothing to do with Biblical Ophir, as has been suggested.⁷³ Now properly *aljôfar* or *aljofre* in Portuguese, it is the name given to seed pearls, but it was often used more loosely to refer to ordinary pearls. The three major areas where they were fished for were the Persian Gulf, around Sri Lanka and in the vicinity of Hainan Island. Tomé Pires mentions them in connection with Hainan, which he refers to both as a bay in his *Suma oriental* and as an island in a letter to King Manuel dated 27 January 1516.⁷⁴ On numerous Portuguese 16th century charts and on some of the Dieppe maps, an island at the head of the Gulf of Tonkin is shown with some spelling of that name, and it continued there in one language or another at least until the 19th century. It seems probable that it was originally written on one map to the west of Hainan and that it was subsequently attached to the wrong island. Be that as it may, Gastaldi's *Terza Tavola* in Ramusio's *Navigazioni et Viaggi* (1554)⁷⁵ records Hainan as *Aliofar*, while in his *La descrizione dell' Asia* (1561)⁷⁶ it appears as *Alofar*. On the latter map there also appears the inscription *Doastoter*, just S.W. of it. This is undoubtedly the result of a misreading of (*I.*) *doaljofar*, '(island) of the pearl'. The positioning of it makes clear that he did not realise that *Aliofar* or *Alofar* and *doaljofar* were different versions of the same name. The same applies in the case of Ortelius' *Asiae Nova Descriptio* in his famous 1570 atlas entitled *Theatrum Orbis Terrarum*.⁷⁷

On it *Alofar* figures as a town on Hainan and Gastaldi's *Doastoter* has turned into *Danstoter*.

Both Gastaldi's maps and Ortelius' one have a very defective outline of the Vietnam coast compared with those of Ribeiro; moreover, Gastaldi's 1561 map and Ortelius' 1570 one both place an inscription which is undoubtedly intended to represent Hainan, *Aman* or *Ainan* and *Aima* respectively, against a small island near Canton; the Gastaldi map adds another inscription between *Alofar* and *Aman* or *Ainan* which reads *Qui si pescano le perle*, 'Here pearls are fished for'. Evidently there was some confusion over the position of Hainan and a failure to recognise the meaning of the variant renderings of the Portuguese word *aljofer*.

The proper name for Hainan, in such forms as *ainam* or *ainaõ*, appeared on maps at least as early as those of Diogo Ribeiro in 1529 and it also seems to figure on some of the Dieppe maps in such forms as *prignant*,⁷⁸ presumably from an original Portuguese version such as *p: (ulo) aynam*.⁷⁹

A comparison of the positioning of *c: de fremose, coste des herbaiges, saill* and *magna, Baye perdue, Coste dangereuse* and *y^e aliofer* on the Dieppe maps with their suggested corresponding features on surviving Portuguese maps, *cabo de camboja, costa de champã, pulo condor, pandrã, costa dauarela* and *ainaõ* (Figs 3 and 4), makes it quite clear that the scale is chaotic, further evidence that the east coast of *Jave-la-Grande* is a composite map. The order of the names, however, does correspond, and endless examples show that to be much more significant than their precise location. The location of Hainan, the rarity of names on the upper part of the coast except on maps with a somewhat suspicious number of them, Vallard, Le Testu and 'Pasterot', and the absence of the expanded *prancel* shoal, would seem to confirm that the component parts were made very early, almost certainly before the 1517 voyage to China.

The *y^e de tubaros*, apparently a version of *tubarois*, 'sharks', is a far from improbable name for an island in the South China Sea, where Chinese fishermen for centuries have landed on many normally uninhabited islands in search of sharks for sharks' fin soup. It is impossible to pin down such a name to any particular island with any certainty on a map of such diverse scale, but its position between *saill* and *magna* (*pulo condor* / Con Son Islands) and *y^e de Aljofer* (*ainam* / Hainan) strongly points to its being the Paracel Islands which were the most feared navigational hazard of the South China Sea.⁸⁰

No name of obviously Malay or Chinese origin seems to have been attached by the Portuguese to the Paracels and the enormous supposed shoal stretching south from them. They were usually known merely by the name *prancel* or *parcel*, whence the modern Anglicized name. Yet Diogo Ribeiro, working in Seville for the Spaniards, calls them by the Spanish name *y^{as} del atabalero*, 'kettle drummer islands'.⁸¹ The Dieppe cartographers name them *y^a Atabaca*, presumably for what is now *atabaque*, 'Kettle drum' island in Portuguese. Bartolomeu Lasso (1590 and 1592-4) calls them respectively *do atauaqueiro* and *Doa Tavaquero*, island(s) 'of the kettle drummer'.⁸³ Strangely, none of these names, all of Arabic origin, figures in any surviving rutters, where *prancel* was always used.

Was *atabaca* a name given by the Arabs or Malays, or by the earliest Portuguese there, for some imagined sound similarity between kettledrums and waves breaking on a reef, or was the original inscription *atalaia*, one of the numerous Portuguese near synonyms for a reef or shoal? The Spanish cartographer Alonso de Santa Cruz, in his *Islario general* (1545),⁸⁴ quite clearly gives the Spanish form of that word, *atalaya*. The most likely solution would seem to be that a Portuguese inscription intended to read *I: dataiaia*, 'the island of the shoal', was transcribed by one copyist as *I:*

databaca, 'the island of the kettle drum' and by another as *I: de tubaros* or *I: dos tubaros*, 'the island of sharks', for final 'os' was often not unlike a single manuscript letter 'a'.

Channels through the supposed shoal appear on maps by Diogo Ribeiro (1527 and 1529), Gaspar Viegas (c. 1537), some of the Dieppe cartographers and those of Gastaldi. Except for those of Gaspar Viegas who provides no inscription, the others bear a variously worded one, in Spanish, or in Gastaldi's case Italian, indicating that they provided a way through to the *lequios* (i.e. the Ryukyu Islands and Formosa / Taiwan) and Borneo. It is interesting to note that these inscriptions on the Dieppe maps are in Spanish, not Portuguese as one would expect. This suggests that the French may have managed to get hold of copies of Diogo Ribeiro's maps made for the Spaniards, as well as of charts of specifically Portuguese origin.

The name frequently transcribed as *Baye Neufve*, 'New Bay', appears on the Dieppe maps in a variety of guises where three different Portuguese inscriptions figure on the corresponding bay on the Vietnamese coast on their 16th century charts. *Cinco chagas*, as we have seen, was the name given to the headland where Vungtau now stands; *caranguejo*, 'crab' island, is probably what is now known as Ilo-Ilo island,⁸⁵ but in any case it was one that marked the entrance to the northern branch of the Mekong (*camboja*) River;⁸⁶ the variously spelled sentence *aqui tomaõ (a) bonansa* or *bonança*, literally 'Here they take (i.e. await) good weather' appears only on later maps.⁸⁷ The bay behind the *cinco chagas* (St Jacques) promontory provided not merely shelter in adverse weather conditions, but also a convenient place to wait for the high tide which would render possible the crossing of the bar to proceed up the Mekong to the only important trading centre of the area, the city of *camboja*. *Cinco chagas* was so called because of the prominent landmark provided by a group of five hills. Although modern British Admiralty charts show no islands by that headland, the Dieppe maps show five small and two larger islands just by the entrance to *Baye Neufve*. Nearly all detailed Portuguese, Dutch, French and British charts of the Vietnamese coast show a group of four, or more frequently five islands off that headland, at least until about 1800. Presumably they originally got there as some sort of shorthand representation of the promontory's appearance as five islands when viewed from afar. The mysterious place named *chaquaõ* or *chaqão* in that vicinity on several of Fernão Vaz Dourado's charts⁸⁸ is undoubtedly a mistaken rendering of *chaguas* or *chagas* which became detached from *cinco* or *sinquo*, or the figure 5, or possibly the group of five 'islands'.

It seems highly improbable that any distortion of *cinco chagas* can possibly have given rise to *Baye Neufve*. A close examination of this inscription on the Harleian and Desceliers 1546 maps suggests that they actually read *Baye nensne* and *Baye Nenfue* or *Nensue* respectively, showing evidence of the common confusion of 'n' with 'u' and long 's' with 'f'. The Vallard and 'Pasterot' atlases both give *baie nene*. 'Pasterot' records Newfoundland as *Terres neufues* while Vallard has *terra Nene* or *Nena*. This name thus presents real problems. If the bay has been correctly identified, then the Portuguese, sailing as they undoubtedly did with Asian pilots, can hardly have had any reason to call it *baia nova*, 'new bay'. It could, of course, be a French addition, as *Gouffre* evidently was. The fact that the Pierpont Morgan map gives the completely unrelated reading, *Baye fremose*, is likewise a mystery.

It is conceivable that the word *bonansa* alone was on the original, as some sort of 'shorthand' version of the sentence we have seen recorded above. If so, it would only have required the 'o' to have been taken as a colon or full stop, for *b: neufue* not to seem an unreasonable rendering of the uncomprehended word, especially as it would have appeared to be attached to a large bay. Another possibility is that *caranguejo*, written on two lines with a capital 'C', could have caused the first four letters to be mis-

read as *baia* and 'translated' as *Baye*, while the remainder of the word was Gallicized; long 's', 'j', 'f' and 'l' caused much confusion.

Despite the failure to provide a decisive solution regarding *Baye Neufve*, the other place names examined, together with cartographical evidence, seem to point fairly conclusively to the identification of *Jave-la-Grande*'s east coast as that of Vietnam, not Australia. It seems certain that the original chart on which it was based was itself a composite one, made up of a reasonably accurate representation of the Mekong delta area for the period in question and an inverted chart of the Con Son Islands in more or less their right position. This would then seem to have been joined to an outline of the coast of Vietnam north of it very similar to that provided by the 'Cantino', Caverio and Waldseemüller 1516 maps; the gradualness of the coastal curve is similar and so is the angle at which the Mekong delta is attached. The very vague positioning of what must represent Hainan suggests that it was inserted from hearsay, not from direct knowledge.

The first Dieppe maps started appearing c. 1540. Magellan had discovered Tierra del Fuego some 20 years previously and it had been widely accepted as being a northerly projection of *Terra Australis Incognita*. Thus when either a Portuguese or a Frenchman attached the west coast of *Jave-la-Grande* to the incomplete western coast of Java proper, it must have seemed to French cartographers part of another such projection. Added weight would have been provided to this hypothesis by the fact that it was just in the area where Marco Polo's *Java Major* was believed to exist. If the fact that the Portuguese often applied the name *Jaua Maior* to Java itself was unknown to the French, then the name confusion with that of Marco Polo's mysterious land is readily understandable. When another chart of an unrecognised piece of eastern coastline, actually that of Vietnam, came into French hands, it must have seemed only too natural to identify it as the eastern counterpart to the west coast they already possessed. The logical place to attach it was the eastern end of the other fairly large Indonesian island whose southern coastline was a blank on Portuguese maps of the time, namely Sumbawa.

Taken in conjunction with already published material concerning the west coast of *Jave-la-Grande*, it would seem that the evidence here presented concerning the east coast must surely mean that it can no longer be convincingly maintained that *Jave-la-Grande* is Australia. Proof of Portuguese priority in the discovery of Australia will therefore have to be sought elsewhere.

Flinders University of South Australia

REFERENCES

1. Alexander Dalrymple, *Memoir concerning the Chagos and adjacent islands* (London 1786), p. 4.
2. The particularly significant Dieppe maps portraying *Jave-la-Grande* are:
 1. The Harleian or Dauphin world chart, British Library, Add. MS. 5413, reproduced in Charles Henry Coote, *Autotype facsimiles of three mappemondes . . . with an introduction, including a short notice on Desceliers' later mappemonde of 1553* (Aberdeen 1898, Bibliotheca Lindesiana, Collation and Notes, No. 4).
 2. Jean Rotz, *Boke of Idrography*, by Johne Rotz (1542), British Library, Royal MS. 20 E. ix, reproduced in facsimile in Helen Wallis, *The maps and texts of the Boke of Idrography presented by Jean Rotz to Henry VIII* (Oxford 1981).
 3. Pierre Desceliers, World Chart (1546), John Rylands Library, University of Manchester, French MS. 1, reproduced in Coote.
 4. Nicolas Vallard, Anonymous portolan atlas (1547), The Huntington Library, San Marino, California, MS. HM 29.

5. Anonymous portolan atlas (c. 1555), Pierpont Morgan Library, New York, MS. M. 506.
6. Livre da la marine / du / Pilote / Pasterot? / (1587?), British Library, Egerton MS. 1513.
7. Guillaume Le Testu, *Cosmographie universelle selon les navigateurs*, Paris, Ministère des Armées, Cote D.I.Z. 14.
A complete list of the Dieppe maps may be found in Wallis, pp. 84–5.
8. 'Cantino' map (1502), Biblioteca Estense, Modena, MS. C.G.A.2, reproduced in Armando Cortesão and Avelino Teixeira da Mota, *Portugaliae Monumenta Cartographica* (Lisbon 1960), vol. 1, plates 4 and 5. Further references to this work will read *PMC*, followed by the volume and plate numbers.
9. Francisco Rodrigues, Journal, Paris, Bibliothèque de l'Assemblée Nationale, Cote E(D)19, MS. 1248. The charts are reproduced in *PMC*, I, 35 and 36 and also in Armando Cortesão, *The Suma Oriental of Tomé Pires . . . and the Book of Francisco Rodrigues* (London, Hakluyt Society, 1944). Plates viii, ix, x and xxv in the latter work are panoramic drawings. Besides the reproductions and an excellent introduction, there is a translation and transcription of both texts. We know that Rodrigues saw a large map by a Javanese pilot and that he copied part of it. See *Ibid.*, pp. lxxviii–lxxix.
10. Avelino Teixeira da Mota, *Reflexos do Tratado de Tordesilhas na Cartografia Náutica do Século XVI* (Coimbra 1973, Agrupamento de Estudos de Cartografia Antiga, LXXX, Secção de Lisboa), p. 11.
11. William A. R. Richardson, 'Is Jave-la-Grande Australia? The linguistic evidence concerning the west coast', *The Globe* (Journal of the Australian Map Circle), vol. 19 (1983), pp. 9–46. See especially pp. 28–32 and 37–9.
12. The word *abrolhos*, a contraction of *abre olhos*, 'open eyes', became a now obsolete maritime term for a reef and is found widely distributed on early Portuguese charts. See Humberto Leitão e J. Vicente Lopes, *Dicionário da Linguagem de Marinha Antiga e Actual* (Lisboa, 2a, ed., 1974), pp. 7 and 540.
13. *PMC*, IV, 477A and 490C.
14. Ian McKiggan, 'The Portuguese expedition to Bass Strait in A.D. 1522', *Journal of Australian Studies*, vol. 1 (1977), pp. 2–32.
15. Kenneth McIntyre, *The secret discovery of Australia* (Medindie, South Australia and London 1977).
16. Pierpont Morgan atlas, folios 11v and 12r.
17. William A. R. Richardson, 'Jave-la-Grande: a Case of Cartographic Confusion', *The Geographical Magazine*, vol. LIV, no. 11 (November 1982), pp. 615–22 and Richardson, 'Is Jave-la-Grande Australia?'
18. Chart of Sumatra and the western end of Java by Hessel Gerritsz (1620), Berlin, Staatsbibliothek Preussischer Kulturbesitz, Kaart T 7567. The complete southern coastline appears on another chart by Hessel Gerritsz dated 1628. It is reproduced in Günter Schilder, 'The charting of the south coast of Java', *Archipel* (Paris), vol. 22 (1981), facing p. 96.
19. Schilder, pp. 88–9.
20. George Collingridge, *The Discovery of Australia* (Sydney 1895).
21. Schöner's globe outline is reproduced in Lawrence C. Wroth, *The Voyages of Giovanni da Verrazzano 1524–28* (Newhaven and London 1970), plate 13.
22. Oronce Finé's *Nova et Integra Universi Orbis Descriptio* is reproduced in Nils Erik Nordenskiöld, *Facsimile atlas* (rep. New York 1961), plate XLI.
23. 'Pasterot' atlas, nos 17, 18, 32, 33, 34, 36, 37, 43, 46, 52 and 77.
24. 'Pasterot' atlas, nos 29, 33 and 34.
25. Andrew Sharp, *The Discovery of Australia* (Oxford 1963), pp. 6 and 11.
26. Albert Anthiaume, *Cartes marines, constructions navales, voyages de découverte chez les normands, 1500–1650* (Paris 1916), vol. 1, pp. 534–5.
27. Nicolo Caverio (often spelt Canerio), World chart, Paris, Archives du Service Hydrographique de la Marine, reproduced in Edward Luther Stevenson, *Marine world chart of Nicolo de Canerio Januensis 1505 (circa): a critical study with facsimile* (New York 1908).
28. *PMC*, I, 35 (vii), and Cortesão, plate xvii.
29. The original is in Schloss Wolfegg, Württemberg. It is reproduced in *Die älteste Karte mit dem Namen Amerika aus dem Jahre 1507 und die Carta marina aus dem Jahre 1516 des M. Waldseemüller*, ed. by Joseph Fischer & Fr R. v. Wieser (Amsterdam 1968, orig. edn Innsbruck London 1903).
30. Fernão Lopes de Castanheda, *História do Descobrimento e Conquista da Índia pelos Portugueses (1497–1549)* (Coimbra 1924–33), vol. 1, livro 2^o, p. 387.
31. Gaspar Correa, *Lendas da Índia*, in Academia das Ciências de Lisboa, *Collecção de Monumentos Inéditos para a História das Conquistas dos Portuguezes* (Nendeln/Liechtenstein: Kraus Reprint, 1976, tomo 2, p. 474, orig. edn, Lisbon 1860).
32. João de Barros, *Década Terceira da Ásia* (Lisbon 1777), parte 1^a, livro 2^o, pp. 177–84 (orig. edn, Lisbon 1563).
33. Charles R. Boxer, *João de Barros* (New Delhi 1981), p. 108.
34. De Barros, pp. 184–5, and Castanheda, pp. 422 and 425–6.

30. Ribeiro's 1525 (Mantua), 1527 (Weimar), 1529 (Vatican) and 1529 (Weimar) maps are reproduced in *PMC*, I, 37, 38, 39 and 40 respectively.
31. Nuño García de Toren's map of southern Asia and the Far East, Turin, Biblioteca Reale di Torino, Portolano O XVI 2, partially reproduced in R. A. Skelton, *Explorers' Maps* (London 1958), p. 141, fig. 87.
32. *PMC*, I, 95 B, from the anonymous *Livro de Marinharia* (c. 1560) is one example.
33. The Hague, Algemeen Rijksarchief, Leupe 130.
34. Oxford, Bodleian Library, MS. D1. 185 (5).
35. *PMC*, I, 45 C, D, 46 A, B, charts of Western Europe and N. Africa by Gaspar Viegas.
36. *PMC*, III, 270, chart of 1570 by Fernão Vaz Dourado.
37. *PMC*, III, 385 B, chart by Bartolomeu Lasso and Henricus Florentius van Langren published in Jan Huygen van Linschoten's *Itinerario* in 1596.
38. Guiljelmus Blaeu, *India quae orientalis dicitur et insulae adiacentes*, Amsterdam, 1642, and Johannes Janssonius, *Mar di India*, 1700 (Canberra, National Library of Australia, T224 and T748 NK1580 respectively).
39. Nicolas Vallard atlas, folios 5v and 6r.
40. Rotz atlas, folio 30r.
41. *Ibid.*, folios 9v and 10r.
42. 'Pasterot' atlas, nos 48, 49, 50, 55 and 58.
43. See note 18.
44. 'Pasterot' atlas, nos 2, 15, 29, 32 and 40.
45. The Desceliers 1546 map 'translates' *tubaros* as *merloupes*, 'sea wolves?', not by either of the normal modern French words for shark, *requin* and *squale*. The term *loup de mer*, also literally 'sea wolf', is the modern term for a variety of seal, and maps 34 and 35 of the 'Pasterot' atlas record a group of *Isles aux loups marins* and a *Terre de loups marins* just west of its fictitious, Antarctic version of *Jave-la-Grande*'s east coast. The islands do not correspond to *tubaros* in positioning.
46. Richardson, *Jave-la-Grande*, pp. 617 and 620, and Richardson, *Is Jave-la-Grande Australia?*, pp. 18–20.
47. Richardson, *Jave-la-Grande*, pp. 620–1, and Richardson, *Is Jave-la-Grande Australia?*, pp. 20–1. Since those two articles were published, further confirmatory evidence of the very early association of cubeb with Sunda, the western end of Java, has been forthcoming, from the García de Toren map made in Valladolid (Spain) in 1522 (see note 31). Between the named islands of Sumatra and Java is another island bearing an inscription which appears to read *biliqualiabiqui*. The letter 'i' on each occasion is undotted and it is by no means certain that the penultimate 'i' in the above inscription is a correct reading. Since we know that some writers described Sunda as a separate island there is no doubt that the inscription applies to it. Bearing no resemblance to any place name in that area, it is undoubtedly a misreading of three words joined together: *bili*, in modern Malay *beli*, *quabab* (c.f. *quabeb* and *kebab*) and the Portuguese word *aqui*. It is therefore a three word sentence meaning 'Buy cubeb here'.
48. The name is given in three different spellings on the 'Cantino' map, *fulucadora*, *fullu candora* and *ffulucadora*.
49. Vallard and 'Pasterot' have *sal*, Le Testu, *sel* and the Pierpont Morgan map has *sell*.
50. Vallard has *Illa do magna* both above and below *Illa do sal* and the Harleian has *ysles de magna* against the largest island. It also has both that inscription and *y^e de sail* to the west of the island group, while all the other Dieppe maps show both names east of them.
51. British Admiralty chart 3986 clearly has Petite Condore S.W. of Grande Condore, incidentally following the French traditional spelling for them.
52. See notes 3 and 24.
53. Rodrigues, in his brief China *roteiro*, fol. 37v in his *Livro* of c. 1513 clearly gives the then correct spelling *pulo condor*. See Cortesão, p. 320.
54. James Burney, *A chronological history of voyages and discoveries in the South Seas* (Amsterdam 1967), vol. 1, p. 381 (orig. edn London 1803). Burney states, mistakenly, that *coste des herbaiges* is on the Rotz chart.
55. Vallard has *c: frimosa*, *cap da frimosa* and *cap frimosa*, 'Pasterot' *Ca fromosa* and *c: fromosa*. The Pierpont Morgan, the Desceliers 1546 and the Harleian all appear to give the cape the spelling *fremose*.
56. *PMC* provides numerous examples.
57. See note 4. The relevant folio is 138r. A transcription and translation are given in Cortesão, pp. 390 and 112 respectively.
58. Pierpont Morgan, folios 11v and 12r.
59. *PMC*, I, 51 C and D, 52 A and B by Gaspar Viegas.
60. Rodrigues, in fol. 37 of his China *roteiro* gives a *ponta daberela*. See Cortesão, p. 320.
61. *PMC*, I, 95 B and 97 B from the *Livro de Marinharia* (c. 1560); *PMC*, II, 105, 124 fol. 9, 139A, 156 and 177 fol. 9, all by Diogo Homem between 1558 and 1568; and *PMC*, II, 234 fol. 9 by Bartolomeu

- Velho (c. 1560). The same spelling is used for the name of the cape concerned on a number of charts in *PMC*.
62. The Desceliers 1546 and the Pierpont Morgan both give *perilleuse*.
63. Rotz, folio 10r. Vallard's map 1 gives *costa dangeroza*.
64. Ma Huan, *Ying-Yai Sheng-Lan: 'The overall survey of the ocean's shores'*, (tr. and ed. by Feng Ch'eng-Chün with introduction, notes and appendices by J. V. G. Mills, Cambridge 1970, Hakluyt Society Extra Series XLII), p. 204.
65. *PMC*, 111, 244, 270, 271, 284, 307, 340, all by Fernão Vaz Dourado. Various versions of the spelling *lantam* could also possibly really indicate the same place.
66. The bay shown on modern charts with the name Padaran is south of Cape Padaran. A glance at any early Dutch charts such as Leupe 130 or 265 (The Hague, Algemeen Rijksarchief) makes quite clear that the bay and port referred to under such spellings as Paderan, Padaram, Padrang, Panderaan etc. is north of the cape. See also Pierre-Yves Manguin, *Les Portugais sur les côtes du Viêt-Nam et du Campa* (Paris 1972, Publications de l'École Française d'Extrême Orient, vol. LXXXI). His study, primarily of Portuguese rutters dealing with the Vietnamese coast, gives transcriptions and a French translation of a number of them. The numerous spelling variations of most place names are very revealing.
67. Abraham Ortelius, *Theatrum Orbis Terrarum* (Amsterdam 1570). The map concerned is entitled *Asiae Nova Descriptio*.
68. Berlin, Staatsbibliothek Preussischer Kulturbesitz, Kuarle T 7557.
69. Nearly all Portuguese renderings of Padaran on charts and in rutters have an 'n' after the first vowel or a tilde over it.
70. See note 24.
71. See note 59.
72. British Admiralty charts 3986 and 2660a.
73. Sharp, p. 8.
74. Cortesão, pp. 120 and 517.
75. Giovanni Battista Ramusio, *Navigazioni et Viaggi*, vol. 1 (2^a ed., Venetia 1554).
76. Jacobo Gastaldi, *La descrizione dell' Asia* (1562), British Library, M.T.11. g.1(6). The section is entitled *Il disegno della terza parte dell' Asia*.
77. See note 67.
78. Vallard chart no. 2.
79. Rodrigues, in his China *roteiro*, fol. 37v gives *ayham*, not *aynam* as transcribed by Cortesão, p. 320. Ribeiro, on his 1529 (Vatican) map does not name the island but records *C: de aytam* against the adjacent headland.
80. The Pierpont Morgan atlas alone, on folios 11v and 12r reverses the positions of *tubaros* and *aliofer*.
81. Ribeiro's 1529 (Vatican) map.
82. The Harleian and the Pierpont Morgan at least.
83. *PMC*, III, 375 and 383 respectively.
84. Alonso de Santa Cruz, *Islario general de todas las islas del mundo* (1545), Madrid, Biblioteca Nacional, MS. Res. 38. His map of the Far East is partially reproduced in Carlos Quirino, *Philippine cartography* (Amsterdam 1963), p. 28, fig. 13.
85. Ma Huan, p. 204, identifies this islet, which he renders Llo—Llo, by the Chinese name of *Lo Hsü*, while on p. 206 a nearby islet is given the Chinese name of *Mao hsieh chou*, 'Hairy Crab islet'.
86. The Mekong was mentioned by that name (*Mecom*) by the Portuguese national poet, Luís de Camões, in Canto X, verse 127 of his epic poem, *Os Lusíadas*, 'The Lusíads', (1572); he had been shipwrecked somewhere in the vicinity of its mouth in the late 1550s. However, it was generally known by Europeans as the river of *camboja*. That name was also used to indicate both Kampuchea, the country, and its capital, even though the situation of the latter varied over the years as a result of Thai invasions.
87. It appears on *PMC*, IV, 516 by João Teixeira Albernaz (1694), *PMC*, V, 578 B, of unknown authorship (1650) and several others. It was also transferred early to Dutch charts, such as that of Hessel Gerritsz (see note 68). Its apparent failure to appear on surviving 16th century Portuguese charts is not necessarily significant, since it did figure in *roteiros*, though unfortunately the originals of these cannot be dated. See *Le 'Livro de Marinharia' de Gaspar Moreira*, ed. by Luís de Albuquerque et Léon Bourdon (Lisbon 1977, Agrupamento de Estudos de Cartografia Antiga, Série Memórias, 20, Secção de Coimbra), p. 201.
88. *PMC*, III, 244, 270, 271, 284, 285, 307 and 340, all of between 1568 and 1576. It reappeared in varied spellings in the following century. Manguin, pp. 158-9, noted the position as where Saigon River enters the sea and the tempting sound similarity with the word Saigon itself, but rejected that identification as being a name of Vietnamese, not Cham origin and it was well over a century before that area came under Vietnamese domination. It seems almost certain that the final 'ô' was originally a form of 's'. The letter 'u' frequently appeared then where it is quite unnecessary today.